REMARKS

Claims 1-2, 4-7, and 9 are active. The rejection of the prior Office Action of April 30, 2007 is withdrawn and a new grounds of rejection is applied to the claims. Claims 1 and 5 are rejected under 35 USC 102 as being anticipated by Abkowitz. Claims 1-2, 4-7 and 9 are rejected as being anticipated by Hayashi.

Minor amendment is made to certain of the claims in the interest of clarity and consistency.

Amended claims 1-2, 4-7 and 9 are submitted for the Examiner's reconsideration.

Amended claim 1 calls for:

> In an electronic organic component, the combination comprising:
>
> a substrate and/or underlayer of the electronic component; and
>
> an organic semiconductor functional layer coated on the substrate or underlayer;
>
> wherein said substrate or underlayer comprises a biaxially stretched (well-ordered) plastic film such that the orderliness of the plastic film forms the applied functional layer into a well-ordered layer to thereby increase the charge carrier mobility of the coated organic functional layer.

This claim is amended to improve its form and no substantive amendments are made in view of all of the pending prior claims. For example, the functional layer is further described in amended claim 1 as a semiconductor layer. This is not new to the claimed subject matter. Both prior claims 5 and 6 called for the functional layer as comprising a semiconducting layer. Thus no new issues are raised precluding the entry

of this amendment after a final rejection. The issues present in the prior response are the same as in the present amended claims submitted herein for reconsideration.

Minor amendment is made to claims 4 and 6 to correct minor formality issues noted in the above-noted Action.

Claim 1 is rejected as being anticipated by Abkowitz and by Hayashi. Applicants traverse this rejection. Claim 1 is amended to include certain of the subject matter of claims 5, 6 and 7, namely, it also calls for the functional layer to comprise a semiconductor layer on the underlayer or substrate. Claim 5 is also rejected as being anticipated by Abkowitz and by Hayashi and claim 7 is rejected as being anticipated by by Hayashi. Thus claim 1 corresponds substantively somewhat to the same issues present in claims 5 and 7 which claims include similar subject matter as amended claim 1.

The rejection of claims 1, 5 and 7 over the cited references is traversed. The Action states that Abkowitz discloses a substrate and/or underlayer (2) which is to be coated with an organic functional layer, referring to col. 1, lines 45-49 and to col. 11, line 56 through col. 12, line 5. Applicants disagree that Abkowitz discloses a semiconductor organic functional layer applied on a substrate or underlayer as claimed.

Abkowitz, col. 1, lines 45-49: This portion of the reference does not support the asserted conclusion. It states that the composition of the invention is useful for organic light emitting diode structures, field effect transistors and other active organic device that is capable of carrying an electrical current. This portion of the reference is silent as

to any substrate or underlayer being biaxially stretched to form a well ordered plastic film as asserted and is also silent as to the presence of a semiconductor functional organic layer being on such a substrate or underlayer. Neither a biaxially stretched substrate nor an organic semiconductor on such a substrate is expressly or implicitly disclosed in this portion of the reference.

While such active organic devices might have such a substrate and might have such a functional layer, based only on applicants' disclosure, which is improper, such structures are not inherently disclosed in the referred to section of the reference. To be anticipatory, the disclosed subject matter must be inherent in the cited reference. The cited disclosure in the reference is not inherent as to applicants' claimed subject matter. That disclosure might be related to a possibility, but mere possibilities is insufficient to support an anticipation rejection.

See MPEP 2112 as to inherency in a cited reference of a disclosure referred to as being anticipatory of claimed subject matter. In MPEP 2112, section IV the examiner must provide rationale or evidence tending to show inherency.

> "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic, citing *In re Rijckaert.*
>
> "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized persons of ordinary skill. Inherency, however, nay not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " Citing *In re Robertson.*

> "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Citing *Ex parte Levy*. (Here the invention was a catheter balloon that was biaxially oriented. The reference disclosed a balloon made of biaxally oriented material. The examiner argued the balloon was inherently biaxially oriented. The Board reversed as no reasoning to support the conclusion was given.)

See also MPEP 2141.02 as to inherent disclosure and the citation of references on such a basis. Plainly, col. 1, lines 45-49 does not inherently disclose what is claimed in amended claim 1 (and claims 5 and 7). There is no support at this location for a semiconductor material applied on a substrate or under layer that is biaxially stretched as claimed.

The Action also refers to Abkowitz col. 11, line 56 through col. 12, line 5 as disclosing this claimed subject matter, a semiconductor layer on a biaxially stretched underlayer or substrate. There also is no disclosure here of a semiconductor layer on a biaxially stretched substrate or under layer disclosed in this portion of the Abkowitz reference.

In the reference at col. 11, line 45 et seq., a conductor 1 is shown in Fig. 1. This is an electrical conductor. The conductor 1 comprises a substrate 2 on which is disposed a fluorinated carbon filled fluoroelastomer ohmic-contact providing layer 3 on which is a charge transport layer 4 over which is a collecting contact layer 5. The fluorinated carbon filled fluoroelastomer ohmic-contact providing layer 3 is an electrical contact, i.e., an electrical conductor and not a semiconductor as claimed, much less an

organic material. This is not an organic material. Not all materials containing carbon are organic.

A semiconductor is not an electrical contact and vice versa. The fluorinated carbon filled fluoroelastomer ohmic-contact providing layer 3 is not inherently a semiconductor much less organic. Not all carbon compounds are organic. No convincing line of reasoning is given as to why the fluorinated carbon filled fluoroelastomer ohmic-contact providing layer 3 is an organic semiconductor layer contrary to the express disclosure of this reference.

Whether or not the substrate is a biaxially stretched material is irrelevant since no semiconductor is disclosed in the reference disposed on this substrate as claimed.

In respect of claim 5, the Action states that Abkowitz discloses a semiconducting material at col. 1, line 40 to col. 2, line 11, formed on an underlayer, citing col. 2, lines 4-11, that is biaxially stretched at col. 11, line 58. Applicants have carefully reviewed col. 1, line 40 to col. 2, line 11, and at col. 11, line 58, and fail to find support for the asserted conclusion of a semiconductor on a biaxially stretched substrate or under layer as claimed. The reference at col. 1, lines 53-55, merely states "it is difficult to make stable ohmic contact to organic insulators and semiconductors." The object of the disclosed invention is to provide ohmic contact providing compositions to an active organic device. There is no disclosed relevancy of this disclosure to applicants' claims 1, 5 or 7. An ohmic contact does not comprise a semiconductor as disclosed by the Abkowitz reference. It might be coupled to such a semiconductor, but such coupling is

not relevant to what is claimed. For these reasons, claims 1, 5 and 7 are not suggested by Abkowitz much less anticipated thereby.

Claims 1, 5 and 7 are also rejected as anticipated by Hayashi. Applicants disagree. The Action in connection with claim 5 states that this reference discloses a semiconducting layer of organic material formed on an underlayer comprising biaxially stretched plastic film, citing pars. 0015, 0134 and 0480 of the reference. The Action also states that Hayshi discloses organic semiconductor transistors (0148) on PET (0015, 0023 and 0134). Disclosing a transistor is not the same as disclosing the specific structures as claimed. One does not suggest, much less anticipate the other.

The problem with these conclusions is the reference at the cited locations does not support the conclusions that an organic semiconductor layer is on a biaxially stretched substrate or under layer as claimed. The reference does not go so far.

Par. 0015 –Applicants have carefully reviewed this paragraph and fail to find any disclosure of an organic semiconductor material on a substrate or under layer as claimed. This paragraph merely discloses display element sheets having memory performance. They can be formed by coating material on a film with electrodes (PET). The reference is silent at this portion to structures as claimed including an organic semiconductor layer on a biaxially stretched substrate and does not support the conclusion asserted. Mere possibilities as to what might or might not be inferred to be disclosed is insufficient to support an anticipation rejection.

Par. 0023 – A conventional display element sheet and a peripheral circuit are discrete components. The reference states that a method of forming a driver by flexible plastic transistors made of coated organic material has been proposed to replace printed paper sheets and conventional displays. The reference is silent at this portion to structures as claimed including a semiconductor layer on a biaxially stretched substrate and does not support the conclusion asserted. Mere possibilities as to what might or might not be inferred to be disclosed is insufficient to support an anticipation rejection.

Par. 0134 – The layers constituting the laminated layer (carrier transport layers inserted between light emission layer and the cathode electrode to form a laminate layer per par. 0133) are disposed on a base. The base is a supporter of the EL element and is plastic specifically as mentioned. The reference is silent at this portion to structures as claimed including an organic semiconductor layer on a biaxially stretched substrate and does not support the conclusion asserted. Mere possibilities as to what might or might not be inferred to be disclosed is insufficient to support an anticipation rejection.

Par. 0480 – This discloses synthetic paper divided into synthetic film paper and synthetic fiber paper. The synthetic paper is one kind of film paper and has the lamination structure of two or more synthetic resin layers. The mechanical characteristics of each resin layer can be changed by a rolling method, uniaxial or biaxially rolling for a synthetic resin film, the type of resin, the type of filler to be added to resin or filling ration etc. No organic semiconductor is mentioned much less an organic semiconductor on a stretched substrate. The reference is silent at this portion

to structures as claimed including a semiconductor layer on a biaxially stretched substrate and does not support the conclusion asserted. Mere possibilities as to what might or might not be inferred to be disclosed is insufficient to support an anticipation rejection. The generic disclosure of organic transistors is not relevant to what is claimed without any reasoning showing their relationship to what is claimed.

Par. 0148 – Describes figure 4D which comprises a lamination of electric layers 27, 28 and 29 in stacked form. The electric layers may comprise a power source, a drive circuit, a control circuit and so on. Each electric layer may comprise organic semiconductor transistors. This disclosure begs the issue. A representative transistor is disclosed in Fig. 4C. Fig. 4E is another embodiment of the electric layers in parallel rather than stacked as in Fig. 4D.

Fig. 4C discloses a representative organic transistor having a semiconductor layer 35. But the semiconductor layer 35 is not disclosed as being on a biaxially stretched substrate or under layer. In this figure, the semiconductor layer 35 is on a cyanoethyl pullulan layer 32 on which electrodes are formed. The layer 32 is on layer 31 forming a gate. An insulator 36 is on the semiconductor layer 35. The specification is silent as to the layer 32 being stretched. Mere possibilities is insufficient and what is claimed is not inherent in this portion of the reference.

Par. 0147. In Figs. 2A to Fig. 3D, 16a and 16b are electrodes. 15 is a display layer and no semiconductor layer on a substrate or under layer as claimed is shown or disclosed.

Applicants have carefully reviewed this reference and find that there is no support in this reference for the claim 1, 5 and 7 subject matter. If the Examiner persists in this rejection he is respectively requested to point out with particularity where there is support for an organic semiconductor layer on a stretched substrate or under layer as claimed because applicants can find no such support at the presently designated locations of the cited references. Bits and pieces of what is claimed may be disclosed, but this is insufficient. No enabling disclosure of what is claimed is present. More is required for a showing of anticipation than mere potential possibilities. There is no motivation to do what is claimed in the cited references. Claims 1, 5 and 7 are not suggested, much less anticipated by the cited references, and are believed allowable over the cited references.

The remaining claims 2, 4, 6-7, and 9, depend from the independent claims and are believed allowable at least for these reasons as well as the structures claimed therein not shown or suggested by the cited references. These claims are believed allowable.

Since claims 1-2, 4-7 and 9 have been shown to be in proper form for allowance, such action is respectfully requested.

While no fee is believed due, the Commissioner is authorized to charge any fee due for this paper or credit overpayment to deposit account 03-0678.

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Janice Speidel — January 9, 2008
Janice Speidel — Date

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